It All Adds Up
The Cost of Housing Development Fees in Seven California Cities
March 2018
About the Terner Center

The Terner Center formulates bold strategies to house families from all walks of life in vibrant, sustainable, and affordable homes and communities. Our focus is on generating constructive, practical strategies for public policy makers and innovative tools for private sector partners to achieve better results for families and communities.

For more information visit: www.ternercenter.berkeley.edu

Table of Contents

Executive Summary.................................................................3
Introduction.................................................................................4
Understanding the Range of Development Fees ................6
Defining Development Fees....................................................7
Data and Methods ..................................................................9
Findings...................................................................................10
Implications..........................................................................22
Policy Recommendations.....................................................23
Conclusion.............................................................................25

Acknowledgments

We are grateful to all the experts who lent their insight to this project. Planners and analysts from the cities of Sacramento, Roseville, Los Angeles, Irvine, Berkeley, Oakland and Fremont generously helped us understand and estimate development fees. The assistance of architects and engineers was critical in developing a detailed prototype, and the perspective of local developers provided invaluable context to the data. Finally, we are grateful for the incisive feedback from the Terner Center’s team, particularly Carol Galante, Carolina Reid, Elizabeth Kneebone and Sara Draper-Zivetz.
Executive Summary

Development fees—which cities levy to pay for services needed to build new housing or to offset the impacts of growth on the community—make up a significant portion of the cost to build new housing in California cities. On average, these fees continue to rise, while nationally fees have decreased. As the supply of housing in the state continues to fall well short of demand and housing costs continue to skyrocket, the structure and total cost of development fees has emerged as an area ripe for policy attention and reform.

The Terner Center for Housing Innovation has undertaken a detailed analysis of development fees in seven sample cities across California—Berkeley, Oakland, Fremont, Los Angeles, Irvine, Sacramento and Roseville—to examine the total amount of fees charged in each city, the makeup of these fees, and the extent to which information on development fees is available to builders.

We found that development fees for multifamily housing range from a low of $12,000 per unit in Los Angeles to $75,000 per unit in Fremont. Fees for single family housing range from $21,000 per home in Sacramento to $157,000 per home in Fremont, over five times as much. We also found that fees can amount to anywhere from 6 percent to 18 percent of the median home price depending on location.

Estimated Development Fees Per Unit for Prototypical Multifamily and Single Family Projects

Note: Fee estimates presented here do not include development fees for utilities or any project-specific fees.
Our research reveals several problems with the way that development fees are currently implemented in California cities:

› Development fees are extremely difficult to estimate.
› Development fees are usually set without oversight or coordination between city departments, and the type and size of impact fees levied vary widely from city to city.
› Individual fees add up and substantially increase the cost of building housing.
› Projects are often subject to additional exactions not codified in any fee schedule.

These findings have significant implications for the cost and delivery of new housing in California. Specifically, without standardized systems to estimate development fees, builders cannot accurately predict total project costs during the critical predevelopment stage, leading many builders to rely on informal relationships with planners and building officials to obtain accurate estimates. The unpredictability of these fees may also delay or derail projects altogether. Moreover, development fees add to the cost of construction, reducing housing affordability and hindering housing development. Even affordable housing projects are sometimes subject to impact fees that raise the cost of building. In addition, the way that cities structure their fees can incentivize fewer, larger units, reducing the amount of housing built.

Beyond these case studies, more research is needed to assess the implementation of development fees across a wider range of cities and provide evidence to inform improved policies. Additionally, policymakers should open a broader discussion of how cities can pay for the full costs of growth without hindering much-needed housing development. Still, this research points toward several preliminary policy recommendations to improve state and local development fee policies:

› Adopt objective standards for determining the amount of fees that can be charged.
› Adopt a fee transparency policy and implement best practices for setting and charging fees.
› Define when fees can be levied and changed during the development process.
› Identify alternative ways to pay for the costs of growth to reduce cities’ reliance on fees.

Policymakers at the local and state level should consider these recommendations when discussing solutions to the ongoing housing crisis. While addressing development fees is just one strategy to remove barriers to new housing, it could have a tangible effect across California.

Introduction

Building new housing is expensive. From the price of land and materials to the price of architects, engineers, contractors and subcontractors, many cost factors shape whether or not a project will pencil out, and with few exceptions, these costs are on the rise. For example, land prices in the United States increased by 76 percent from 2000 to 2016—almost twice the rate of inflation.¹ In 2017 alone, the price of construction materials such as lumber, steel, and concrete grew by 4.4 percent.²
By one estimate, overall construction costs increased by 19 percent for multifamily housing and 21 percent for single family housing between 2008 and 2017, also faster than the rate of inflation.3

In California, development fees are rising as well. Between 2008 and 2015, California fees rose 2.5 percent, while the national average decreased by 1.2 percent during that same period.4 While estimating the effect that fees have on overall development costs is difficult given the variability of fees between jurisdictions as well as variation in product type, some studies have found that fees can comprise up to 17 percent of the total development cost of new housing.5 In this study, we found that fees can amount to 18 percent of the median home price in some cities. These and other escalating costs make it more difficult for builders to deliver new housing for sale or rent at affordable prices.

Development can also be expensive for local jurisdictions. Plan reviews, inspections and connections to public infrastructure require a great deal of time from city staff during the entitlements and construction phases. Besides development services, building new housing also entails expansions of city infrastructure, resources and public services to support growth. Cities charge fees to pay for the services they provide during the development process as well as to offset the costs of new development borne by the larger community. These fees, commonly known as impact or mitigation fees, go towards infrastructure development (for example adding lanes to a road to support additional traffic) or other public benefits (such as new parks or affordable housing development). California cities have tightly restricted funding sources and, as a result, fees are one of the few ways that cities can pay for the indirect costs of growth.

California’s development fees were nearly three times the national average in 2015.6 From 2008 to 2015, average development fees for new single family homes in the state grew by approximately 19 percent.7 The extent to which California’s development fees outpace those in other states is of particular concern for housing affordability; multiple studies have shown that development fees result in an overall rise in the price of housing.891011

In this analysis, the Terner Center examined the current state of development fees in seven cities—Berkeley, Oakland, Fremont, Los Angeles, Irvine, Sacramento and Roseville. We assessed how each city determines their fees, how they are applied to specific projects, how accessible this information is to the public and, ultimately, how much these fees end up adding to the cost of building housing. To compare “apples to apples” we developed project prototypes for multifamily and single family projects, allowing us to quantify the variation in fees on similar projects across jurisdictions. We also augmented our analysis with conversations with planners at each of these cities, as well as home builders who have completed projects in cities across the state.

This report provides background on the purpose and evolution of development fees in California, lays out our methodology, presents our findings in the current policy context, discusses implications of these findings and provides initial policy recommendations. It is intended to lay the groundwork for a closer look and broader discussion on this topic among researchers, policymakers, developers and other stakeholders. However worthy these topics might be, this paper does not delve into the question of whether or not any specific fee is appropriate, or whether housing development fees are the right way to pay for other public policy goals.
Understanding the Range of Development Fees

Development fees can be broadly classified into two types: service fees and impact fees. Service fees cover the cost of staff hours and overhead. These fees are essential in funding the city’s role in the development process, paying for plan reviews, permit approvals, inspections and any other service as a project moves through city departments. The logic behind service fees is that private developers should pay their own way for the services they need to build their projects, without subsidy from taxpayers. According to California’s Proposition 26, service fees are not considered a tax on developers as long as they do not “exceed the reasonable costs [...] of providing the service” or, in the case of permits and inspections, that fees are simply “reasonable.” In this way, service fees must reflect the true cost of the service itself, otherwise they could be defined as a tax and fall subject to a two-thirds voter approval. Planning and building departments depend on service fees to support their staff. For example, one planner noted that their department laid off planners during the recession due to a decrease in fee revenue following a steep decline in development.

Impact and other offset fees are somewhat less straightforward, but generally refer to fees that offset the public costs of new development, such as the need for new infrastructure. Cities derive their authority to levy fees from the police power granted to them by the California Constitution which allows cities to make and enforce all local ordinances not in conflict with general law. In the wake of the 1978 passage of Proposition 13 and the loss of a significant amount of property tax revenue, local governments turned to development fees as a means to generate revenue. This practice continued unabated until 1987 when the California legislature passed the Mitigation Fee Act (AB 1600). AB 1600 provides broad guidance to cities on the use of impact fees, defined as payments required by a local agency as a condition of approval for a development project.

The Mitigation Fee Act generally applies a broad “reasonable relationship” standard to fees and exactions, meaning that fee amounts must be arguably reasonable relative to the impacts of the project. This component of the Mitigation Fee Act makes up the basis for each city’s “nexus study,” which cities must commission to determine that the type and amount of AB 1600 fees charged on new development represent a reasonable connection to the impacts of the new development itself. However, the nexus study requirement still leaves cities with wide latitude to set fee amounts as the external impacts of development themselves are broad and difficult to pinpoint.

In addition to fees covered under the Mitigation Fee Act, other types of fees are commonly required of new development. For example, some cities also impose requirements on new development to provide for a public good (rather than mitigate an impact of the development). Examples include public art fees and affordable housing fees. The authority to charge these additional fees falls under a city’s police power authority as granted by the California Constitution.

Beyond predetermined fees, cities may also charge project-specific fees or require other contributions in exchange for project approvals. These additional exactions can be negotiated through a Development Agreement or a Community Benefits Agreement. Project-specific fees are technically subject to higher scrutiny: the Nollan/Dolan test, which refers to two landmark Supreme Court cases in 1987 and 1994 that ruled that a project exaction must be “roughly proportional” to the project’s impact. Since those cases were decided, the Nollan/Dolan test has often been used to challenge ad-hoc fees and requirements imposed on developers by local jurisdictions. The 1996 California Supreme Court Case Ehrlich v. City of Culver City confirmed that the Nollan/Dolan test is not applicable beyond these types of ad hoc fees and exactions.
Aside from cities, other entities, such as school districts and utility companies, also have the authority to levy development fees. School districts’ authority to charge fees stems from the 1998 passage of SB 50 and allows them to charge a very specific amount to new development, based on a per-square-foot calculation. Utility companies also levy fees on new development for connectivity to services including water and sewer. Under state law, these fees should not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed.

<table>
<thead>
<tr>
<th>Fee</th>
<th>Act/Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service Fees</strong></td>
<td>Gov. Code Section 66017 mandates that agencies may increase or levy a new application, permitting, or entitlement fee through an ordinance or resolution, and that any change must be paired with a public meeting. Gov. Code Section 66014a stipulates that “fees may not exceed the estimated reasonable cost of providing the service for which the fee is charged.”</td>
</tr>
<tr>
<td><strong>Impact Fees</strong></td>
<td>The Fee Mitigation Act (Gov. Code Section 66000 et seq.) authorizes cities to charge fees as a condition of approval of new development. These fees must have a reasonable relationship with the fee’s use and the new development and must be used and accounted for pursuant to Section 66006.</td>
</tr>
<tr>
<td><strong>Parks and Recreation Fees</strong></td>
<td>The Quimby Act (Gov. Code Section 66477) authorizes cities to charge fees or require the dedication of land for parks and recreation facilities.</td>
</tr>
<tr>
<td><strong>School Fees</strong></td>
<td>Gov. Code Section 65995 authorizes school districts to charge fees specifically for the construction of new school facilities and explicitly limits the total amount of the fee.</td>
</tr>
<tr>
<td><strong>Water and Sewer Fees</strong></td>
<td>Gov. Code Section 66013 authorizes public utilities to charge fees for utility connections and capacity. These fees must not exceed the estimated reasonable cost of providing the service.</td>
</tr>
<tr>
<td><strong>Development Agreement Fees</strong></td>
<td>Gov Code Section 65864 allows cities to charge fees and exactions beyond published fees, which can be required of a project through a Development Agreement.</td>
</tr>
</tbody>
</table>

**Defining Development Fees**

For the purpose of this analysis, we focused on city development fees that fall into one of two broad categories: “planning and building service fees” and “impact and offset fees.” Note that in this analysis, we did not estimate project-specific fees or development fees for utility districts (see the note on utility-related fees below).
Planning and Building Service Fees

Service fees pay for city services needed during the approval and construction phases of projects. Service fees cover planning department work during the entitlement process, plan checks, inspections, and other work during construction, usually provided by the building department, and utility plans, connections, and inspections. Examples of service fees include the staff time needed to review plans, the cost of connecting water mains to a new project, and inspections for fire prevention systems.

**Planning service fees** cover the planning department costs during the entitlements process, including plan checks, general plan updates, design review, and variances.

**Building service fees** pay for the building department costs of permitting a project and other city services needed during the construction phase, including plan checks, engineering (with grading and seismic work), mechanical work, infrastructure connections and inspections, as well as work to ensure that fire and public safety services are available to the building.

**Utility service fees** go towards the plan reviews, permits, and inspections needed to connect water, sewer, electricity and gas to the project. These fees were not included in our analysis.

Impact and Offset Fees

Impact and other offset fees, sometimes called mitigation fees, pay for expansions of city infrastructure and services needed to accommodate growth beyond the tasks necessary to build the specific residential project. Impact fees are set aside in a designated fund and used for projects in the broader community. They go towards public goods and services such as schools, parks and art, capital improvement, environmental resources, affordable housing, transportation, utilities and fire and public safety.

**School fees** support new school facilities to serve future residents of new developments.

**Park and art fees** are set aside for parks, parkland, arts districts, and other public spaces and public art.

**Transportation fees** fund the costs of expanding transportation infrastructure usage related to new development.

**Housing fees** are earmarked for developing affordable housing needed to complement market-rate housing growth.

**Environmental fees** pay for environmental protection and mitigation programs, such as air quality mitigation and environmental endowment fees.

**Capital improvement fees** pay for any expansions of city facilities or infrastructure, such as roads, parks, libraries, fire stations, and utility plants.

**Fire and public safety fees** go towards expanding the capacity of fire and public safety systems.

**Utility impact fees** pay for expansions of water, sewer, electricity, and gas infrastructure. These fees were not included in our analysis.
A Note about Utility Fees

While builders we spoke with said that utility companies charge for water, electricity and sewer infrastructure connections and that these fees often comprise a substantial portion of development fees, we were not able to estimate these fees. Utility companies generally have comprehensive fee schedules available online, but it is not possible to determine which fees apply without deep involved assistance from utility company engineers. The utility companies we contacted do not provide estimates until a full application for a development is submitted. Even then they warned us that the estimates could be off by tens of thousands of dollars. In addition, utility development fees are usually incredibly site-specific and often based on the infrastructure systems and capacity at the exact location of the site rather than broader zones, so city-by-city comparisons based on prototypes would likely be misleading. Since utility fees can add significant costs to development fees, future research should certainly include an assessment of utility fees, and they should be considered alongside other development fees in policy discussions.

Data and Methods

We conducted in-depth case studies of seven California cities to better understand the current landscape of development fees. We selected Los Angeles and Irvine in the Los Angeles area, Berkeley, Oakland and Fremont in the San Francisco Bay Area, and Sacramento and Roseville in the Sacramento area. These cities were selected to provide urban/suburban comparisons, and because each had relatively strong development activity and the potential to evaluate both single family and multifamily development. In addition to collecting data on the fees themselves, we interviewed planners at each of the case study cities as well as developers, architects and civil engineers working in the local area, both to verify our data and to better understand how fees work in practice.

In order to estimate a given project’s total development fees, we designed two prototypical projects: a multifamily project and a single family project (both described in Table 2). Because development fees depend on a broad range of project characteristics, we used interviews and information on past projects to define appropriate dimensions for everything from unit size to the amount of grading needed on the site to the cost of public infrastructure. We also standardized the lot size, recognizing that in reality urban and suburban developments may differ in important ways.
Table 2. Prototypical Project Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Multifamily project</th>
<th>Single family project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>Urban infill</td>
<td>Suburban greenfield</td>
</tr>
<tr>
<td><strong>Number of units</strong></td>
<td>100 apartments</td>
<td>20 single family homes</td>
</tr>
<tr>
<td><strong>Bedrooms per unit</strong></td>
<td>50 1 bedroom apartments</td>
<td>10 3 bedroom, 2.5 bath homes</td>
</tr>
<tr>
<td></td>
<td>50 2 bedroom apartments</td>
<td>10 4 bedroom, 3 bath homes</td>
</tr>
<tr>
<td><strong>Stories</strong></td>
<td>5 residential stories above</td>
<td>2-story homes</td>
</tr>
<tr>
<td></td>
<td>2-story parking garage</td>
<td></td>
</tr>
<tr>
<td><strong>Square feet per unit</strong></td>
<td>850 square feet average</td>
<td>3 bedroom: 1,850 square feet</td>
</tr>
<tr>
<td><strong>Total building square feet</strong></td>
<td>143,240 square feet</td>
<td>4 bedroom: 2,250 square feet</td>
</tr>
<tr>
<td><strong>Lot size</strong></td>
<td>0.64 acres total</td>
<td>2.44 acres total</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>156.3 units per acre</td>
<td>8.2 units per acre</td>
</tr>
</tbody>
</table>

To estimate development fees for each of these projects, we used publicly-available fee schedules, as well as schedules provided to us by planners at each of the case study cities. We used these schedules to calculate fees for both prototypes across each city. We shared these estimates with each case study city, and made adjustments based on their feedback to ensure we were interpreting and applying the fee schedules correctly.

**Findings**

**Development fees are extremely difficult to estimate.**

Development fees are complex by nature—fees depend on parameters specific to each project, and are charged by a range of agencies involved with each step of the approval, permitting, and construction process. But this complexity also makes it difficult for developers to estimate the fees they will be charged as they plan and try to finance a particular development. Of course, all cities calculate fees at some point during the development process in order to bill developers for those fees. But it is important for developers to be able to estimate fees before submitting an application in order to assess the project’s financial viability.

Developers we spoke with said that it is usually difficult to piece together an estimate of fees from publicly available information. In many cities, it is not easy to obtain complete and accurate fee schedules. This problem is compounded by the involvement of multiple agencies and frequent fee updates. Architects and civil engineers we spoke with said that they are often called upon by developers to help estimate fees, a task beyond their capacity. There are some exceptions: developers...
mentioned that a few cities provide complete and transparent fee schedules and offer fee estimates. But most developers said that they are able to navigate the fee process only because they have established relationships with planners at specific cities. Both developers and planners said that developers often “have to know someone” to obtain needed information.

Our own experience as researchers estimating fees for our prototypical projects confirmed what we heard from developers. After our first attempts to calculate fees from publicly available schedules, multiple rounds of corrections with planners and building officials were required to reach an accurate estimate in every case. Through this process, we identified two main factors that affect developers’ ability to estimate fees before submitting an application: (a) the availability of fee schedules in each city and (b) whether the city provides official fee estimates in advance.

In most of the cities we studied, it was difficult to find development fee schedules. Of the seven cities, only Roseville provides a dedicated list of all development fees with detailed schedules that allow a developer to estimate the cost of fees in advance. Fremont and Oakland provide dedicated lists of all impact fees, and list service fees among other fees in the city’s master fee schedule. In Berkeley, Sacramento, Irvine, and Los Angeles, schedules for individual fees are scattered in various hard-to-find places on city websites, and some fee schedules are outdated, apply to only certain types of projects, or are missing entirely. Even with the assistance of planners, who emailed us fee schedules that were not available online, we were not able to find schedules for all the fees charged by these latter four cities.

Even where fee schedules are available, estimating project fees in advance can still be difficult. It is often unclear which fees will apply to a certain project, as many fees depend on the project’s specific location within the city based on local infrastructure requirements or impact zones. Maps of these zones are not always available. In one of the cities we studied, a large fee listed in the master fee schedule did not exist in practice: it had never been applied to a single eligible development project.

The service fees that apply to a project depend on the way the city decides to process the application, which is not always clear from the outset. And many of the service fees listed in schedules depend on the number of staff hours or other internal department costs that a developer cannot estimate themselves. To make estimation even more difficult, fees change frequently over time, and we found that several published fee schedules were out of date.

Recognizing the difficulty of estimating fees from the fee schedules, Sacramento, Roseville, and Fremont do provide advance fee estimates of all development fees, either for free or for a nominal fee. In Irvine, the planning and building departments separately provide estimates at the points of application for planning approvals and then building permits. While this does not give a full estimate of fees in advance, it is an improvement over cities where the only calculation of fees comes with the final bill. Berkeley, Los Angeles and Oakland have no formal process for estimating all development fees in advance. While Los Angeles and Berkeley offer estimates for certain types of fees or certain types of projects, the limited nature of these estimates leave developers with a great deal of uncertainty about the total costs they will incur.

We developed a rating system to capture the extent to which each city publishes complete and up-to-date fee schedules and whether they provide official estimates of development fees in advance. We assessed the fee schedule format (scattered mentions of development fees, development fees listed among all city fees, or a dedicated list of development fees), how many of the fees are listed in a publicly-available schedule (from none to all), whether fee estimates are provided (no fee estimates,
estimates for some fees or types of projects or detailed estimates), when fee estimates are provided (either during the development process or in advance), and finally the overall feasibility of estimating fees in advance. Figure 1 shows our ratings of the fee schedules and fee estimates for each city, as well as our rating of the overall feasibility of estimating fees, from straightforward (dark green) to infeasible (dark red).

Figure 1. Feasibility of Estimating Fees in Advance

Whether or not fee schedules are available, an official fee estimate provided by planning and building officials is essential for developers to accurately estimate fees in advance. In all the cities where it is straightforward to estimate fees, official fee estimates are offered. Without official estimates, we had to rely on a significant amount of time and assistance from planners and building officials to develop our own detailed estimates—something not always available during the development process. In the case of Berkeley, city staff were unable to provide us with the information requested to develop an accurate estimate, and so we could not develop fee estimates and include Berkeley in the following analysis. The difficulty of estimating scheduled fees for many cities and utility districts combined with the unpredictable costs that may arise during development agreement negotiations mean that developers must often begin a project with very little idea of the final bill for development fees.
Development fees are usually set without oversight or coordination between city departments, and the type and size of fees levied vary widely from city to city.

We found a wide variety of fee structures among the cities we studied. Cities charge different types of impact fees, assess fees based on different metrics, and charge dramatically different amounts for similar types of service or impact fees.

Under California law, cities must commission a nexus study for the impact fees they charge, but they have broad authority to set them at any level they choose. We heard about a range of approaches to setting the levels of fees, some based on more objective measures of development costs and others on city priorities and comparisons with other cities. While each fee is generally designed with care, in all of the cities we studied the responsibility for setting fees is scattered across the planning department, building department, and several other departments and agencies, with little to no coordination or oversight.

In some cities, no one may even have knowledge of all the development fees they charge. As a result, development fee schedules can often seem arbitrary. Only Roseville has a comprehensive fee schedule with all their service and impact fees together in one place, coordinated by their development services department. Roseville, Sacramento and Fremont offer advance fee estimates which require project managers on the city staff to work with all the departments that charge fees. Other cities are working to address this problem as well: Oakland conducted an economic feasibility study of all their service and impact fees (including utilities), before adopting new fees, and Los Angeles audited their impact fees in 2015 in order to understand the extent of their existing fees before considering new ones.17

**Service Fees**

All the cities charge relatively similar types of service fees: fees for planning work throughout the entitlements process, fees for building and inspections needed to ensure that the development meets safety standards and fees for connecting the project with surrounding infrastructure. Cities also charge fees for plan checks and inspections related to utilities.18

While cities tend to charge the same types of service fees, the amount of those fees varies a great deal, as shown in Table 3. Planning service fees range from $31,000 to $103,000 for the 100-unit multifamily project prototype, and from $24,000 to $96,000 for the 20-house single family project prototype. Building and inspection service fees range from $106,000 to $1.1 million for the multifamily project, and $44,000 to $1.1 million for the single family project. A few patterns emerge: building and inspection fees are higher than planning fees in five of the six cities. Total service fees are higher for the multifamily project than the single family project in every case (though lower per unit), likely because of the greater complexity of building multifamily structures. Yet the differences in the amounts charged outnumber the similarities.
Table 3. City-Levied Development Service Fees by Type
Estimated for Prototypical 100-Unit Multifamily and 20-Home Single Family Projects

<table>
<thead>
<tr>
<th>Service Fees for 100 Multifamily Apartments</th>
<th>Los Angeles</th>
<th>Sacramento</th>
<th>Roseville</th>
<th>Oakland</th>
<th>Irvine</th>
<th>Fremont</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Services</td>
<td>$ 80,464</td>
<td>$ 31,529</td>
<td>$ 35,865</td>
<td>$ 30,961</td>
<td>$ 103,304</td>
<td>$ 54,705</td>
</tr>
<tr>
<td>Building Services</td>
<td>$ 169,259</td>
<td>$ 181,104</td>
<td>$ 105,877</td>
<td>$ 624,242</td>
<td>$ 1,095,727</td>
<td>$ 251,288</td>
</tr>
<tr>
<td><strong>Total Service Fees</strong></td>
<td><strong>$ 249,723</strong></td>
<td><strong>$ 212,633</strong></td>
<td><strong>$ 141,742</strong></td>
<td><strong>$ 655,203</strong></td>
<td><strong>$ 1,199,031</strong></td>
<td><strong>$ 305,993</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Fees for 20 Single Family Homes</th>
<th>Los Angeles</th>
<th>Sacramento</th>
<th>Roseville</th>
<th>Oakland</th>
<th>Irvine</th>
<th>Fremont</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Services</td>
<td>$ 96,380</td>
<td>$ 24,242</td>
<td>$ 25,447</td>
<td>$ 68,781</td>
<td>$ 94,345</td>
<td>$ 60,945</td>
</tr>
<tr>
<td>Building Services</td>
<td>$ 70,232</td>
<td>$ 52,157</td>
<td>$ 43,443</td>
<td>$ 467,619</td>
<td>$ 1,089,518</td>
<td>$ 173,410</td>
</tr>
<tr>
<td><strong>Total Service Fees</strong></td>
<td><strong>$ 166,612</strong></td>
<td><strong>$ 76,399</strong></td>
<td><strong>$ 68,890</strong></td>
<td><strong>$ 536,400</strong></td>
<td><strong>$ 1,183,863</strong></td>
<td><strong>$ 234,355</strong></td>
</tr>
</tbody>
</table>

*Note: These totals do not include service fees for utility connections, which are usually charged by utility companies.

**Impact Fees**

While the types of service fees are fairly consistent across places, cities charge a range of different types of impact fees. Figure 2 shows the types of impact fees charged by each city, with the basis for assessing each fee. Impact fees for schools are charged across the board as allowed by state law. All of the cities charge impact fees for parks, and some for arts as well. All but Los Angeles charge impact fees for transportation and traffic impacts, and all but Sacramento charge capital improvement impact fees, which can be used for any kind of public facilities or infrastructure. Sacramento, Oakland, Fremont and Irvine charge affordable housing impact fees, Roseville and Fremont charge fire and public safety impact fees, and Sacramento and Roseville charge environmental impact fees for purposes such as air quality mitigation and environmental protection funds.
Both the type of fees and basis for how they are assessed can influence project design. Though fees based on the number of units or bedrooms are a sensible way to approximate the number of people living in a project, developers and architects we spoke with said that unit- and bedroom-based fees incentivize building fewer, larger units in a project as compared with fees based on square feet or valuation (a rough initial estimate of construction costs). Some cities are sensitive to this dynamic, such as Sacramento which uses a range of measures to calculate impact fees: square feet, valuation, units, bedrooms, and even the number of new trips generated by the development. Sacramento planners said that they purposefully chose to structure their fees by square footage as much as possible to lower the costs for dense multifamily and townhome projects in comparison to single family developments. On the other hand, Oakland found in their economic feasibility study that smaller units are more profitable for developers, and housing advocates pushed for more large family-sized units to be built. So Oakland restructured their fees based on units rather than square feet to avoid further incentives to build smaller units. Irvine uses valuation as well as units, and Fremont bases most of its impact fees on the number of bedrooms. On the whole, the number of units is the most common basis for impact fees, and Los Angeles, Roseville, and Oakland rely heavily on unit-based fees.

The amounts of impact fees also vary a great deal. Figure 3 shows the amounts of each type of impact fee per unit. School fees are by far the highest in Fremont. Irvine and Fremont both charge substantial fees for parks and art; all the other cities charge much smaller amounts. Sacramento and

---

**Figure 2. Impact Fees by Type and Basis**

<table>
<thead>
<tr>
<th></th>
<th>Los Angeles</th>
<th>Sacramento</th>
<th>Roseville</th>
<th>Oakland</th>
<th>Irvine</th>
<th>Fremont</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Square Feet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Square Feet, Units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parks and/or Art:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units</td>
<td>Square Feet, Bedrooms, Units</td>
<td>Units</td>
<td>Bedrooms</td>
<td>Valuation</td>
<td>Bedrooms, Square Feet</td>
<td></td>
</tr>
<tr>
<td>Transportation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trips, Valuation, Units</td>
<td>Units</td>
<td>Units</td>
<td>Square Feet, Units</td>
<td>Bedrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Improvement:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units</td>
<td>Units</td>
<td>Units</td>
<td>Valuation</td>
<td>Bedrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Square Feet</td>
<td></td>
<td>Units</td>
<td>Units</td>
<td>Square Feet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire and Public Safety:</td>
<td>Valuation</td>
<td></td>
<td>Bedrooms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental:</td>
<td></td>
<td>Units</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Square Feet</td>
<td></td>
<td>Units</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Roseville charge somewhat higher impact fees for transportation than other cities. Oakland, Fremont and Irvine all charge large affordable housing impact fees, whereas Sacramento charges a small affordable housing impact fee that is only charged for lower-density developments. Though all cities we studied waived their affordable housing impact fee for affordable projects, in some cases affordable housing projects are subject to the same school, park, art, transportation, capital improvement, and environmental impact fees as market-rate projects.

In all of the cities we studied, fees also vary within jurisdictions based on localized factors such as the availability of existing infrastructure. In most cities, fees are higher in undeveloped greenfield areas than in urban infill areas, and fees are higher for single family homes than multifamily buildings. These differences reflect the different costs and impacts of different types of development in different areas. Hyper-localized fee structures can be quite complex; often based on multiple districts within the city or even parcel-level factors, and different types of fees can vary based on different location factors (i.e. the districts for a transportation impact fee may be different than the districts for a water district impact fee). In Oakland, fees are highest for single family, townhome, and multifamily development in the hills, north Oakland and downtown, while they are lowest for single family, townhome, and multifamily development in east Oakland. West Oakland has mid-level fees for single family, townhome and multifamily developments. In Sacramento, housing impact fees drop by more than 50 percent in designated incentive zones where planners have identified the need for more housing.

Cities often update existing fees and adopt new fees. Fee increases occur annually in many cities, and some fees are designed to increase over time. For example, Fremont links their fees with inflation. Fremont also lowered some impact fees during the recession; thus their fees can roughly respond to market conditions. In a more complicated example, Oakland’s impact fees will rise three or four times between 2016 and 2021, depending on the zone. Oakland planners explained this increase in fees as a way to soften the implementation of new impact fees that replaced an inclusionary policy without any fees, and said that they kept the new fees low initially to accommodate developers who had already purchased land. Still, fee increases (especially large or unexpected ones) can negatively affect development. One architect described their experience with fee hikes: when the city council approved higher fees in the middle of a project, they suddenly needed to submit their projects before the new rates went into effect. If they had missed the deadline, the project would no longer have penciled out under the higher fees.
### Figure 3. Impact Fees Per Unit by Type
Estimated for Prototypical 100-Unit Multifamily and 20-Home Single Family Projects

<table>
<thead>
<tr>
<th>City</th>
<th>MF</th>
<th>SF</th>
<th>MF</th>
<th>SF</th>
<th>MF</th>
<th>SF</th>
<th>MF</th>
<th>SF</th>
<th>MF</th>
<th>SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Sacramento</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Roseville</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Oakland</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Irvine</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Fremont</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

#### School Impact Fees

#### Parks and/or Art Impact Fees

#### Transportation Impact Fees

#### Capital Improvement Impact Fees

#### Housing Impact Fees
Determining Fees

In speaking with planners, a common theme was that a great deal of thought goes into designing each fee to fairly reflect the costs of types of development in various parts of the city. Most planners also said that they consider the economic feasibility of development and the need for new housing when setting fees, and prioritize and limit fees accordingly. At the same time, many of the planners we spoke with emphasized that because of Proposition 13 and the more recent loss of redevelopment funding, cities have few other options to fund key services, which leads them to rely heavily on impact fees.

In some cases the amount charged reflects the direct cost of building new infrastructure or expanding services. However, for some impact fees the costs of development or economic feasibility are unclear, and some planners expressed uncertainty about how to set the level of fees for indirect impacts. In these cases, cities sometimes use comparisons with other nearby cities to decide on the amount of fees. After comparisons with Santa Monica and Pasadena, Los Angeles determined that their fees were very low, which led the city to consider raising fees (including their recently-approved parks and affordable housing linkage fees). Sacramento planners noted that other nearby jurisdictions impose very high fees, but they chose to keep their fees lower to promote housing growth. In contrast, Fremont considered the fee levels of neighboring cities but decided to maintain high fees for their region. Planners acknowledged that their impact fees are high, but explained that people move to Fremont for their exceptional parks, schools and other amenities, and that high fees are necessary to maintain that quality of life. These very different approaches reflect the wide latitude cities have and wide range of logic applied in setting the level of fees.

Individual fees add up and substantially increase the cost of building housing.

While each individual fee may be justifiable, together they may add up to an excessive burden on new development. Figure 4 shows the sum of all the service and impact fees that we estimated for a prototypical 100-unit multifamily infill development and a 20-home single family greenfield development. Fees for the multifamily project range from a low of $12,000 per unit in Los Angeles to $75,000 per unit in Fremont. Fees for the single family project range from $28,000 per home in Sacramento to $157,000 per home in Fremont, over seven times as much. In every case, impact fees make up the large majority of the cost of development fees.
Figure 4 shows the total estimates for each project, as well as the fees per unit, per bedroom, and per square foot. It is useful to look at the fees in these three different ways to compare development fees for multifamily and single family projects. In all of the cities we studied, per-unit development fees were lower for multifamily infill than single family greenfield projects. This makes sense as apartments are smaller than single family homes, and require far fewer resources to build and operate. Multifamily infill developments also use much less land than single family greenfield developments, connect with existing infrastructure, and generally have lower impacts on traffic and schools. However, fees per bedroom are more comparable for multifamily and single family development, and fees per square foot are higher for multifamily construction in most cities.
Measuring fees on a per-unit basis gives the best sense of the magnitude of development fees. Multifamily fees range from $12,000 to $75,000 per apartment, and single family fees range from $21,000 to $157,000 per house. To show just how expensive fees can be, Figure 5 compares single family development fees with the median price of a single family home in each city. Development fees cost 18 percent of the median home price in Fremont and Irvine, while fees cost only 6-10 percent of the median home price in Los Angeles, Sacramento, and Roseville. This shows that even in cities with relatively low fees, development fees still make up a significant portion of the sales price of a new home. More research is needed to better understand exactly how, and by how much, development fees influence the cost of housing, either by raising prices to consumers or by limiting supply.
Projects are often subject to additional exactions not codified in any fee.

In addition to set fees, developers are often required to pay project-specific fees and exactions levied by cities to ensure approval of their project. Many of these additional fees and exactions are agreed upon through development agreements, which are negotiated at various points during the entitlement process on a project-by-project basis. Development agreements may involve project design changes, building additional amenities, agreements to lease units or commercial space at below market prices, project labor agreements and payments over and above codified fees in exchange for city planning approval of the project and necessary variances or zoning changes.

The additional fees and exactions levied through the development agreement process can create further uncertainty by adding costs that are not codified by any specific entity and potentially stalling development progress. Development agreements are often required to gain support from planning commissioners or city council members to approve the project. Builders we interviewed said that the practice of exacting project-specific fees further politicizes the development process, and that these additional expenses have become so commonplace that they have come to expect them as a “cost of doing business.”
Some builders said that last-minute exactions have caused some of their projects to be delayed, modified or canceled altogether. In one instance, a builder explained that during the final city council meeting to approve a project, the city requested an additional $3 million in parks fees. To get the project approved, the developer agreed to pay the fees under protest. They felt that this exaction went above and beyond what they were legally required to pay, and they were eventually able to recover the fee after legal negotiations with the city. The builder noted that though they did not have to pay the fee in the end, dealing with the unexpected fee required a considerable amount of extra resources and time, and they nearly had to cancel the project altogether. These exactions are not limited to market-rate projects. For instance, a builder of an affordable housing project explained that they were asked to pay for an entire new plaza adjacent to the project site, but through negotiations agreed to “fee out” instead for $250,000.

Nearly all builders agreed that this practice of additional exactions was commonplace in California cities. We asked planners in our case study cities how often development agreements are used for projects similar to our prototypes. Most projects in Irvine require development agreements on top of their already-expensive fees. In Sacramento and Fremont, most projects do not require development agreements; they are reserved for very large or exceptional projects. **Oakland only requires development agreements when the city sells public land to a developer.** Roseville uses development agreements primarily in new growth and infill areas. Development agreements in Roseville are negotiated by specific plan area when undeveloped land is readied for development, and as a result Roseville includes development agreement fees in their fee schedules, making them somewhat more consistent and transparent than in other cities. While we could not develop an accurate measure of the cost of development agreements and other project-specific exactions in this study, they should be considered alongside scheduled service and impact fees when assessing the costs that exactions add to development.

**Implications**

The lack of transparency, high cost, and sometimes arbitrary structure of development fees, as well as the added cost of project-specific exactions, have serious consequences for housing development.

**Expensive fees add to the cost of development and may reduce housing affordability and even hinder housing production.**

When development fees approach a fifth of the local median house price, it can be difficult for developers to make a project pencil out, a factor that can prevent new housing from ever getting built. In cases where affordable housing projects pay impact fees for parks, transportation, capital improvements or other priorities, those fees work directly against the goal of building affordable housing. Prior research also suggests that development fees are often passed along to residents, making the housing that is built less affordable.21 22

**Poorly structured development fees can incentivize adverse design choices.**

Several builders noted that expensive development fees can adversely affect the design of projects. Architects and civil engineers mentioned that arbitrary-seeming differences in fee rates can incentivize suboptimal design choices to minimize fees. Value engineering often involves unobtrusive choices such as reducing the size of water meters. But fees can also have more significant
consequences, such as incentivizing developers to build fewer units. Specifically, architects and builders that we interviewed noted that they will sometimes increase the sizes but reduce the total number of units in a project to avoid paying higher total per-unit fees. This is of particular concern given the need for more housing supply in California. On the other hand, in some cities there is a need for larger family-sized units, and in those places a per-square-foot fee that incentivizes smaller units might be less desirable.

Unpredictable development fees can delay or even derail projects.

The uncertainty around development fees can have negative consequences for projects, and can stall the entitlement process or even lead to project failures. Unexpected fees can lead to design changes mid-project. One developer we spoke with noted that when faced with development fees that were much higher than initially estimated, they needed to go back to the design process and pare down the size of the project. Additional costs and delays can even stymie a project entirely.

Without formal systems to estimate development fees, developers must rely on informal relationships with planning and building officials.

Planning and building officials are the best source of information about development fees, and in some cases they are willing to assist developers without a formal system in place. But planning and building officials may not have the time or inclination to work with every developer; developers who do not have existing relationships with city employees may be unfairly disadvantaged. This likely disadvantages newer and smaller development companies with fewer connections or less clout. Even if individual planners or building officials are willing to give builders informal estimates, they may be less complete or accurate than official estimates, and the city is less accountable to similarities between the estimate and the final bill.

Policy Recommendations

Given the importance of development fees to the cost and production of housing in California, a bold rethinking of development fee policies is in order. While much more research and stakeholder engagement is needed to think through a reformed system, several actions could be taken now to improve the development fee process. These suggestions offer initial responses to improve the current system of development fees as outlined in this study; it is also clear that further study and a broader policy debate are needed to assess whether the system requires more extensive reforms.

Adopt objective standards for determining the amount of fees that can be charged.

Legislators should adopt a state-wide standardized methodology with objective standards by which cities must determine the amount of fees that can be charged to new projects. Currently, localities and special districts have a great deal of discretion in determining what they can charge new development; current authority simply requires a determination of “reasonableness” be established between a new development, its impacts, and the associated fees. As a result, there can be wide variation among cities in terms of what fees are charged for, and the amount of those fees. To take an example we found in our research, one case study city requires new developments to pay a park
impact fee of $350 per single family home, while another city requires a park impact fee of $55,000 per single family home. The adoption of a standardized methodology and objective standards for determining fees would ensure a more accountable and sensible process than is currently afforded through existing authority, while also allowing for variation in fees in accordance with cities’ diverse infrastructure needs.

**Adopt a fee transparency policy and implement best practices for setting and charging fees.**

As a matter of basic transparency, cities should provide up-to-date fee schedule information in a publicly accessible format that includes the universe of fees that can be charged to a project. As our work has shown, it is exceedingly difficult to determine the full extent of fees levied on any particular project in most of our sample cities. We have heard from builders that this problem is common among most California cities. Moreover, cities should consider adopting other best practices to make fees more transparent, such as offering detailed fee estimates early on in the development process so that builders have a reasonable understanding of how much they will be charged in fees.

In our analysis, the city of Roseville stood out as a model for transparency, offering free fee estimates as well as providing detailed and complete fee schedules. These services are needed to provide clarity to all builders. Estimates would be particularly useful to small and mid-sized builders who may not have contacts with a building department or a large staff that they can leverage to accurately determine their fee amount, which is critical for financing purposes as well as determining project feasibility.

The method by which utility companies charge development fees should also be examined to ensure that these processes are also transparent and accessible. Greater transparency around development fees would also allow for public scrutiny of fee schedules, which could encourage more careful consideration of the types and amounts of fees.

In addition to transparency, cities should have a centralized and working understanding of the full range of service and impact fees for development in their jurisdiction, and make this information readily available to the public. Cities should also carefully review the types of fees they charge, the amounts of fees, and the basis for fees. This would allow for review of the aggregate costs of development fees as well as each individual fee. Fees should be revised with public and builder input to balance the need to pay for the costs and impacts of development with the pressing need for new development.

Cities should also consider adopting several best practices to improve the way that fees influence development. For instance, cities that would like to incentivize the creation of affordable housing should consider reducing or waiving impact fees for projects with affordable housing units as a tool to increase project feasibility. Cities should also review the metrics on which they base their fees, whether by units, bedrooms, square footage, or other measures, and adjust to avoid adverse incentives. Some cities have already made this shift: Sacramento charges many of their fees on a per-square-foot basis, and has even adopted a vehicle-miles-traveled metric for their transportation impact fee. Cities should also consider fee deferral programs similar to those used in several of the cities we studied, which allow builders to pay fees later in the development process, allowing for financing flexibility.
Define when fees can be levied and changed during the development process.

To bring greater certainty to the development process, cities and legislators should consider setting a clear framework for when fees can be charged and changed during the development process. For example, a policy of calculating all impact fees at the time of project submittal, rather than the building permit stage, could help builders know what to expect. Flexibility should be built in so that fees can be recalculated when a project changes. Service fees should also be estimated at the beginning of the planning and building phases based on service fees for similar projects. Likewise, there should be a well-defined timeline for negotiating development agreements so that additional exactions can be decided upon earlier in the process. These policy changes could give developers much-needed clarity about development fees and curtail requests for additional fees or services at the 11th hour that suddenly increase the cost of a project.

Find alternative ways to pay for the costs of growth to reduce cities’ reliance on development fees.

The current public financing system relies heavily on new development to fund public infrastructure. Driving up the cost of development exacerbates the housing shortage, and residents end up paying the price, struggling to find housing they can afford. Limiting development fees and working to create a more objective and standardized justification for such fees would be an important step to consider. At the same time, cities cannot be put in an impossible situation, facing infrastructure costs for which they have no means to pay. Policymakers must balance cities’ need to cover the direct and indirect costs of development with the urgent need for more housing. Acknowledging and fixing the underlying causes of cities’ fiscal bind—Proposition 13’s restrictions on property taxes, as well as declines in federal and state funding—could go a long way towards reducing cities’ reliance on development fees.

Conclusion

As the cost of housing in California continues to climb, every aspect of the housing development process deserves examination to identify strategies to reduce costs and increase supply. This includes development fees, which comprise an increasingly significant portion of the development budget. Expensive fees increase the cost of development, which both suppresses housing supply and raises the cost of housing for tenants and homebuyers. Further study should be undertaken to fully understand the relationship between development fees and housing costs in California, but in the meantime it is clear that development fees in some cities place a heavy burden on new development. Because state law allows cities broad authority to levy development fees, it is especially important to ensure that fees do not hinder housing production. While we found some best practices in our analysis, some of the fee systems we observed raise serious concerns about the use of development fees in cities across the state.

This research has surfaced a significant number of important remaining questions about development fees. To understand this issue more deeply, development fees should be assessed across a wider sample of cities. Researchers should use data from real projects rather than attempting to calculate fees from schedules, since in many cases the fee schedules are far from complete.
Additionally, policy discussions should be guided by further research about best practices for designing fee structures and how to determine reasonable amounts for development fees, as well as input from builders and local jurisdictions.

Even from this initial analysis, a key takeaway is clear: if development fees are not accessible, reasonable and predictable, they make it more difficult for builders to provide housing to alleviate California’s housing shortage. Policymakers at all levels working to address the shortage should begin with the simple policy changes this report recommends: insisting on transparency, reasonable limits and a straightforward process for development fees, while finding alternative ways to pay for the costs of growth.


7 Ibid.


12 California Constitution, art. XIII C, § 1, subd. (e)(2-3).

13 California Constitution, Art. XI, § 7


16 This means that impact fees are generally easier to estimate than service fees, since impact fees rely solely on project characteristics.
While utility companies charge the bulk of service fees for water, electric, gas, and sewer connections—which further increases total development costs—those fees are excluded from this analysis due to lack of availability.

On December 13th, 2017, the Los Angeles City Council approved an affordable housing linkage fee on new development, ranging from $1 to $15 a square foot depending on project type and location. Our research did not include this new charge which will take partial effect in 2018 before going into full effect in 2019.

For the purpose of estimating valuation before a project is built, cities often rely on estimates from the International Code Council of the average cost per square foot for various types of construction, not including land prices (Data retrieved from https://www.iccsafe.org/codes-tech-support/codes/code-development-process/building-valuation-data/).
